

Intel® 815E Value Communications Appliance Reference Design

Product Highlights

- Scalable performance using Intel® Celeron™ processor (556–733 MHz) to Intel® Pentium® III processor (600–866 MHz) in the PGA 370 socket to address different price/performance needs
- Built on next generation chipset technology, the Intel® 815E chipset offers the performance, stability and reliability customers require for communication appliances.
 - Supports 66 MHz, 100 MHz, and 133 MHz system bus (front side bus) speeds
 - Supports up to 512 MB of PC100 or PC133 SDRAM
 - ATA-100 hard drives
 - USB
- Three 10/100 Ethernet ports for advanced communications appliances. Examples include firewalls (external network, internal network, and a demilitarized zone).
- Right-angle PCI connector permits standard PCI cards to be used while maintaining small form factor (8.5 inches x 5.12 inches). Communication PCI cards like DSL, cable modems, T1 cards and other transmission media are readily available and easily added.
- Two serial (EIA-232) ports for local management and interfacing to peripherals such as uninterruptible power supplies
- Eight software controllable LEDs
- Ease-of-use and stand-alone functionality

Benefits for Developers:

The Intel 815E Value Communications Appliance Reference Design has significant advantages for developers:

- **Time-To-Market:**
 - It provides a comprehensive platform solution that can dramatically accelerate time-to-market. Intel works with independent hardware and software vendors to quickly enable the implementation of designs.
- **Economical:**
 - Schematics are available for download at no cost from Intel's Developer Site at: developer.intel.com/platforms/applied/eiacomm/desk_val.htm

- Intel's value platform delivers the best price/performance solution.

■ Extended Product Lifecycle:

- Embedded Intel processors and other components are designed to meet the extended lifecycle requirements of communications applications.

■ Scalable and Flexible:

- Intel's scalable platform means you can use the same motherboard with a choice of processors, so you can select the right processor for the desired performance.
- The scalability of Intel® Architecture in the 370 socket enables developers to differentiate their products with value-added features and functionality while maintaining the level of performance that end users expect.

■ Quality:

- Intel's manufacturing capacity and quality requirements help ensure product reliability and customer satisfaction.

■ Broadest application support:

- The platform is based on the open Intel Architecture that is familiar to most programmers. Moreover, the architecture supports multiple operating systems, including Linux*.

Product Overview

The Intel 815E Value Communications Appliance Reference Design contains the essential components for delivering the right performance and functionality for value-based communication appliances. This reference design has three 10/100 Ethernet ports for advanced communications appliances. Examples include firewalls (external network, internal network, and a demilitarized zone). The demilitarized zone (DMZ) port allows users on the internet to access information on public servers such as web servers while maintaining the security of the private LAN.

Intel's new value platform architecture delivers the superior performance and high scalability required for the value communications appliance market segment.

Product Overview (continued)

This market segment includes security, network attached storage, web caching, load balancing, all-in-one devices, VoIP and e-commerce appliances that help deliver a new level of services to the network. This reference design is targeted at OEMs who build communication appliances for small medium enterprise market that scales up to the enterprise and medium Internet Service Provider end-user.

This reference design also enables OEMs focused on the communications appliance market segment to reduce their time-to-market. The reference design is easily modified to fit an OEM's needs without reworking the core microprocessor and chipset design. The performance, scalability, and reliability of Intel architecture provides an ideal platform for new designs that target this fast-emerging market segment.

The reference design contains the following information from Intel:

- User's Manual
- Orcad* V.9 Schematics
- .pdf Schematics
- Material list
- Available Original Design Manufacturer List
- Available Independent Software Vendor List

Third Party Vendor Support

Intel works with multiple independent hardware and software vendors to quickly enable the implementation of designs based on the Intel 815E Value Communications Appliance reference design. The following vendors are planning to provide support for this reference design. For more information, visit the Intel Web site at: developer.intel.com/platforms/applied/eiacomm/reference_configs.htm

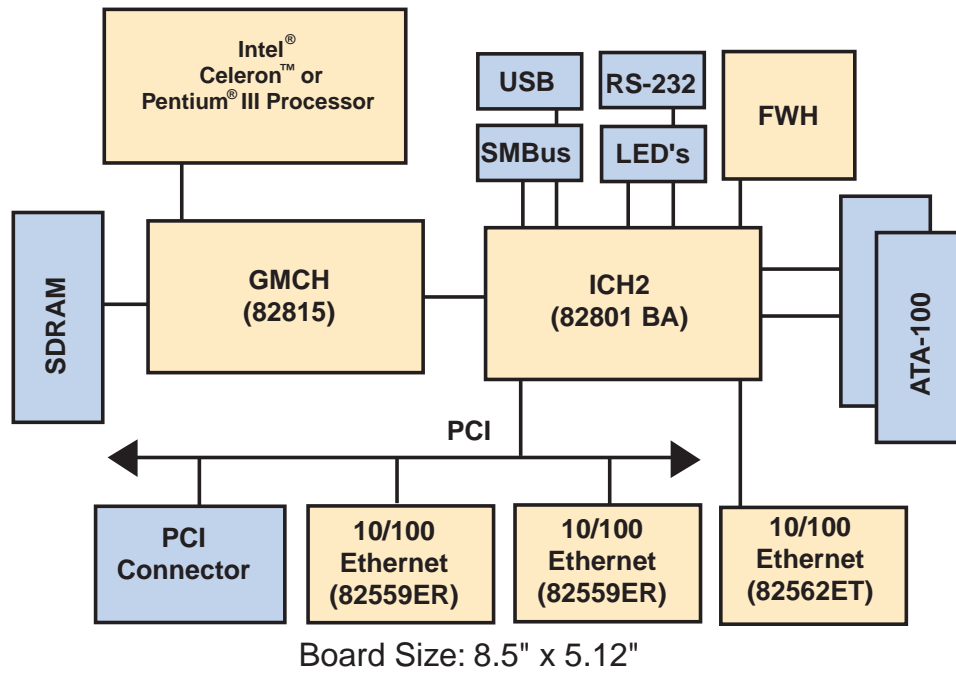
Independent Hardware Vendors

- Force Computers*
- ICS Advent*
- ITOX*
- Portwell*
- Teknor Applicom*
- Trenton Technology*

Independent Software Vendors and Applications

- | | |
|---------------|------------------------------------|
| ■ eSoft* | Internet Gateway |
| ■ Technauts* | Multi Service Access Device |
| ■ WireX* | Small Business Server (All-In-One) |
| ■ LynuxWorks* | Operating System |
| ■ MontaVista* | Operating System |
| ■ Wind River* | Operating System |

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Block Diagram

Intel Access

Developer's Site	developer.intel.com
Reference Design Product Briefs	developer.intel.com/platforms/applied/eiacomm/reference_configs.htm
Other Intel Support: Intel Literature Center	developer.intel.com/design/litcentr (800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada) International locations please contact your local sales office.
General Information Hotline	(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST

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For more information, visit the Intel Web site at: developer.intel.com

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